

From: Poalinelli, Edwin
Sent: Thursday, December 2, 2021 4:43 PM
To: Diangco, Andrea - OSHA <Diangco.Andrea@dol.gov>
Subject: FW: Questions about TRW Microwave

Edwin "Chip" Poalinelli

Section Manager - California Site Cleanup Section I
Superfund and Emergency Management Division U.S. EPA Region 9
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From: PerezSullivan, Margot <PerezSullivan.Margot@epa.gov>
Sent: Monday, June 7, 2021 8:30 AM
To: Ashley Gjøvik <ashleygjovik@icloud.com>
Subject: Re: Questions about TRW Microwave

Hi Ashley, I'm out this week, but wanted to send this on. Thanks!

Question: I am curious what the EPA's expectations are for the frequency (how often) & duration (how long/intensive) of indoor air testing in a building like TRW Microwave. Did you approve that they could stop doing indoor air testing after 2015 — or is it up to the responsible party to decide? Are Ethylbenzene and Toluene COCs for the great Triple Site plume — could they be migrating?

Response: *Superfund cleanups are governed by a complex network of laws, regulations, and guidance. Where there are vapor intrusion concerns, assessments and monitoring are conducted based on site-specific information, such as contaminant concentrations, site uses, history, available data, and mitigation measures.*

At the TRW Microwave Superfund Site, groundwater monitoring has been ongoing. Since 2016, groundwater concentrations for the TRW Microwave site-specific constituents of concern (primarily TCE and breakdown daughter products) have been stable. Because TRW Microwave Site conditions have not changed, EPA believes the remedy in place at the site remains protective and has not required additional ongoing indoor air sampling.

The Regional Water Quality Control Board (RWQCB) and EPA have overseen the cleanup actions at the TRW Microwave Site. Over the decades, site remedies have

greatly reduced contaminant concentrations, including the primary constituent of concern, TCE in groundwater. TCE concentrations at the TRW Microwave Site have declined from upwards of 10,000 parts per billion (ug/L) in the 1980s to generally less than 100 µg/L today (for context, 1 part per billion would be equal to 1 drop of ink in 1 billion drops of water).

The vapor intrusion risk at the site has been addressed under RWQCB and EPA oversight multiple times by the Northrup Grumman Corporation (the responsible party), and the current owner of the property. In 2013 indoor air sampling was conducted in the then unoccupied 825 Stewart Avenue building, which was unfinished and had open conduits in the sub-slab. The results indicated that a few volatile organic compounds were present at concentrations greater than the generic health risk screening values at the time for workers. The 2013 results are available on the EPA TRW Microwave

website:<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=0901181>

Since 2013, the 825 Stewart Avenue building was renovated and Northrup Grumman and the now current property owner proactively implemented a number of protective measures to prevent vapor intrusion into the building:

- August/September 2014:
A sub-slab vapor collection system was installed underneath the site building to vent vapors to the atmosphere.
- October/November 2014:
Contaminated soil from underneath the building in the former TRW Microwave source area was excavated and removed to prevent contaminants in the soil from volatilizing into the building. Additionally, small diameter groundwater wells inside the building were decommissioned and sealed to eliminate a potential vapor intrusion pathway into the building. These mitigation measures are documented in a 2015 Source Area Soil Removal Report, which can be found on the EPA TRW Microwave website.
- December 2014:
To reduce contamination in groundwater and the potential for vapor intrusion, when the building was unoccupied emulsified vegetable oil was injected underneath the building to accelerate the biological degradation of PCE, TCE, and associated by-products. The results are in the annual groundwater monitoring reports, which are available on the EPA TRW Microwave website.
- April 2015:

Openings through pipes, seams, or cracks in the building's concrete sub-slab were sealed to prevent vapor intrusion. Additionally, the spaces between the walls of the three sections of the buildings were also sealed.

After the protective measures above were implemented, indoor air sampling was conducted in May 2015. The May sampling event was conducted with the HVAC system turned off as a worst-case scenario. The indoor air results were less than EPA's generic health risk screening values based on a workplace exposure of 250 days per year for 25 years and demonstrated the effectiveness of the post-2013 measures to mitigate vapor intrusion. The results are available in a June 2015 report available on the EPA TRW Microwave website.

Due to building renovations subsequent to the May 2015 indoor air sampling event, another indoor air sampling event was conducted in December 2015, which EPA agree with. The indoor air sampling event was conducted with the HVAC system off, except for one zone where it was reported that the HVAC system could not be turned off. The December 2015 results again demonstrated that the chemicals related to the TRW Microwave Superfund Site were less than EPA's indoor air human health risk screening values for workers (note, ethylbenzene and toluene are not associated with the TRW Microwave Superfund Site).

2) Communication:

Background: Next, from what Apple has told me, they said they decided internally that they have no legal obligation to have to inform employees about the status of these buildings related to chemicals in the soil or groundwater, or Superfund status, etc. I pressed further if there's an ethical obligation and they said that would be a "bigger conversation." It sounds like they think they only have to inform employees if there's a concrete and immediate risk to employee health (which I argued... how would they know that if they're not testing?... no answer). I'm also feeling pressure to not talk to co-workers about any of this either (from my direct manager and our employee relations teams).

Question: I am curious what the EPA's expectations are for responsible parties related to informing workers in these buildings about the chemicals, the gov status, etc. Maybe this is more OSHA & "Right to Know" — but any guidance you can provide here would be helpful. Also, anything about workers' rights to be able to talk about these sites. I would also appreciate any guidance you have about learning more about possible chemical exposure from this site from an unbiased party. I talked to Dr. Robert Harrison about it yesterday for a bit, but he says we don't have enough data because no one was testing while I was there. I was also going to see if Tracy Barreau and Dr. Prudhomme would take a look informally. Let me know if you know of anyone else who might have thoughts.

Response: EPA is not aware of any regulation or limitation to workers or the public to talk about a Superfund site. EPA supports transparency and providing information to the public, other than where prevented by regulation, guidance, or to protect personally identifiable or confidential business information.

There is no specific right-to-know requirement in the TRW Microwave Record of Decision, which documents the remedy selected for the Site. For a site where conditions are protective of human health there is no specific EPA requirement to notify each site visitor or construction or office worker of a mitigated potential risk. However, EPA does conduct regular community outreach and provides further transparency to the public through websites, fact sheets, and responses to public inquiries. Note that different sites may have different public notification needs or requirements.

3) Monitoring:

Background: Further, because none of us know this is a Superfund site — we don't know not to mess with sub slab vent covers, or to not mess with the HVAC, or to report if there's any usual smells etc. I brought this up with him and he'd said he'd back to me a couple weeks ago — but said that the Env Health Safety team does know and does visit the site. I communicated that does not seem sufficient. In fact, with the wild fire smoke last year, we had EHS turn off the HVAC so outdoor air wasn't being brought in — from what I've seen, it doesn't seem like the vapor intrusion mitigation system was ever considered when they did turn it off. I believe it was off for a week or two. I brought this up too - and he hasn't gotten back to me either. I know I've seen people kicking at those SS-V plugs not knowing what they are too.

Response: Thank you for conveying that during the wildfires last year the HVAC system was turned off, as it is important for EPA to be aware if there's a significant change to site conditions. Even with the HVAC system off, the sub-slab vapor collection system will continue to vent vapors that collect under the building to the atmosphere.

Question: Similar question as #2, but I'm curious what the EPA's expectations are for responsible parties (and companies they may lease to) to communicate to workers in these buildings about how to monitor for their issues (weird smells, weird health issues, etc) or how to report trouble or what not to mess with (plugs, HVAC, etc). Etc. These are my best attempt at mapping results.... But take with a grain of salt... I only play an industrial hygienist on TV. J/k. But seriously, also mapped where I fainted in 2019. Our HR team pushed me to file a workers comp claim about it and the workers comp administrator wanted to call it "continuous trauma" for my time working in at least that building. (Apple had plenty other Superfunds and chemical release sites I visited too). I'm not sure where this will go though... if Apple wasn't testing the

indoor air, it seems impossible to know if there were problematic chemicals in the air or not when it happened.

I did have more fainting in the office in 2020, but it was while this was going on too:

<https://sfbayview.com/2021/03/i-thought-i-was-dying-my-apartment-was-built-on-toxic-waste/>

So I just assumed the fainting in 2020 was carry over from the apartment I moved into Feb 2020. I haven't been back to the office since last year. I've been fine since I moved out of that apartment in Sept 2020 (and haven't been back to the office either).

Response: *EPA believes the remedy in place at the TRW Microwave Site remains protective. EPA will continue to evaluate the protectiveness of the remedy if conditions at the Site change. EPA will also continue to evaluate the protectiveness at the Site during the mandatory Five-Year Review, which was last completed for the TRW Microwave and the Triple Site in late 2019.*

Margot Perez-Sullivan
U.S. Environmental Protection Agency
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E: perezsullivan.margot@epa.gov

On May 27, 2021, at 12:10 PM, Ashley Gjovik <ashleygjovik@icloud.com> wrote:

Hi Margot,

Checking in. 😊

Sent from my iPhone

On May 4, 2021, at 10:58 AM, Ashley Gjovik <ashleygjovik@icloud.com> wrote:

Hi Margot!

Thank you very much. No deadline; I understand you're busy. Just generally sooner than later would be great.

P.S. I don't have anything in the pipeline publishing wise about the TRW Microwave site — though I am speaking with several other agencies about it — in addition to talking with Apple directly. As mentioned, as of my last conversation with Apple Employee Relations, I'm unsure if I can actually talk about the site at work without getting in trouble for doing so — let alone publishing anything.

Thanks again! Appreciate your help.

-Ashley

Ashley M. Gjovik

Juris Doctor Candidate & Public International Law Certificate Candidate, Santa Clara University, Class of 2022

I'm not a lawyer and nothing I say should be considered legal advice.

<https://www.linkedin.com/in/ashleygjovik/>

(415) 964-6272

On May 4, 2021, at 10:13 AM, PerezSullivan, Margot <PerezSullivan.Margot@epa.gov> wrote:

Hi Ashley, Thanks so much for sending, I was about to hit send when this came through! Rest assured, we are working on responses to your questions. I know you've been publishing your work — is there a specific deadline you need us to meet? Please let me know, thank you!

Margot Perez-Sullivan

U.S. Environmental Protection Agency

D: 415.947.4149 C: 415.412.1115

E: perezsullivan.margot@epa.gov

From: Ashley Gjovik <ashleygjovik@icloud.com>

Sent: Friday, April 30, 2021 4:29 PM

To: PerezSullivan, Margot <PerezSullivan.Margot@epa.gov>

Subject: Re: Questions about TRW Microwave

Hi Margot,

As discussed, my questions relate to testing, communication, and monitoring/response. I'm already talking to Apple's Env Health & Safety team to hear their side of things — but I'm interested in hearing the EPA's perspective on these topics. I'd like to understand what y'all's expectations are. I understand it will be much high level policy and may be entirely inline with what Apple is already saying — but it'd like to be able to compare/contrast. If the EPA doesn't have their own guidance on items below, that's fine, just let me know.

1) Testing:

Background: First, from what I've learned from Apple — it sounds like there hasn't been any indoor air testing (sub slab or indoor air) since 2015. (They are currently planning to do testing this year, though they didn't fully explain why they decided to start testing this year after six years). I reviewed the indoor air reports from 2003, 2004, 2013, & 2015. It appears there is a long history of indoor air measurements with chemicals of concern above max industrial risk levels. My desk looks to be in a bit of a hot spot too. In 2015, there was some testing done (May & Dec it appears) but instead of 24/48hr — they did 10hr, at least for Dec. I'm still waiting to see the details of the May testing. And at least in Dec 2015, it appears they weren't able to fully shut off the HVAC either. And the Dec results came back with high levels of Ethylbenzene and Toluene that were suspected to be resulted to the construction, but does not appear to have been verified by an additional test later. It also appears that the building was vacant until Apple moved my team in there in 2015-ish.

Question: I am curious what the EPA's expectations are for the frequency (how often) & duration (how long/intensive) of indoor air testing in a building like TRW Microwave. Did you approve that they could stop doing indoor air testing after 2015 — or is it up to the responsible party to decide? Are Ethylbenzene and Toluene CoCs for the great Triple Site plume — could they be migrating?

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they said that would be a “bigger conversation.” It sounds like they think they only have to inform employees if there’s a concrete and immediate risk to employee health (which I argued... how would they know that if they’re not testing?... no answer). I’m also feeling pressure to not talk to co-workers about any of this either (from my direct manager and our employee relations teams).

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So I just assumed the fainting in 2020 was carry over from the apartment I moved into Feb 2020. I haven’t been back to the office since last year. I’ve been fine since I moved out of that apartment in Sept 2020 (and haven’t been back to the office either).

Anyhow, FYI.

<image001.png>

<image002.png>

—

Ashley M. Gjovik

Juris Doctor Candidate & Public International Law Certificate Candidate, Santa Clara University, Class of 2022

<https://www.linkedin.com/in/ashleygjovik/>

(415) 964-6272

On Apr 29, 2021, at 10:19 AM, Ashley Gjovik <ashleygjovik@icloud.com> wrote:

Hi Margot! No worries at all. Hope things calm down.

Actually, if you'd prefer, I can send you a note today or tomorrow summarizing my questions. I'll start drafting!

Ashley M. Gjøvik

Juris Doctor Candidate & Public International Law Certificate Candidate, Santa Clara University, Class of 2022

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(415) 964-6272

On Apr 29, 2021, at 10:03 AM, PerezSullivan, Margot <PerezSullivan.Margot@epa.gov> wrote:

Ashley, I have not forgotten about you – I got slammed yesterday afternoon. I will be writing them up and sending them on to ensure I captured all of the items for which you are seeking information. I appreciate your time!

Margot Perez-Sullivan

U.S. Environmental Protection Agency

D: 415.947.4149 C: 415.412.1115

E: perezsullivan.margot@epa.gov

From: PerezSullivan, Margot

Sent: Monday, April 26, 2021 10:57 AM

To: ashleygjovik@icloud.com

Subject: Questions about TRW Microwave

Hi Ashley,

Michael forwarded your note and asked that I follow up with you. Please let me know a good time to chat so I can better understand your questions. I will be out of the office tomorrow, but am working the rest of the week. Many thanks!

Margot

Margot Perez-Sullivan

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